EXHIBIT 50

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FILED
EPA REGION VIII
HEARING CLERK

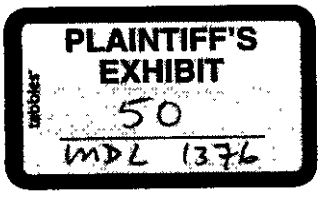
UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 8

IN THE MATTER OF:	UNILATERAL ADMINISTRATIVE ORDER FOR REMOVAL RESPONSE ACTIVITIES
Libby Asbestos Site Export Plant Libby, Montana	U.S. EPA Region CERCLA Docket No. CERCLA-8-2000-10
W.R. Grace & Co., Respondent	Proceeding Under Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §9606(a)

I. JURISDICTION AND GENERAL PROVISIONS

This Order is issued pursuant to the authority vested in the President of the United States by section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. § 9606(a), as amended ("CERCLA"), and delegated to the Administrator of the United States Environmental Protection Agency ("EPA") by Executive Order No. 12580, January 23, 1987, 52 Federal Register 2923, and further delegated to the Regional Administrators by EPA Delegation No.14-14-B and to the Assistant Regional Administrator, Office of Ecosystem Protection and Remediation.

This Order pertains to an approximately eleven acre property referred to as the Expansion/Export Plant (the "Export Plant") located off Highway 37 where it crosses the Kootenai River in Libby, Montana. The Export Plant is located within the Libby Asbestos Site (the "Site"), which encompasses the City of Libby, the Zonolite Mine, and associated W.R. Grace facilities and other locations in and immediately around Libby which received and/or processed vermiculite from the Zonolite Mine. This Order requires the Respondent to conduct removal actions described herein to abate an imminent and substantial endangerment to the public health, welfare or the environment that may be presented by the actual or threatened release of hazardous substances at or from the Site.



ATTACHMENT 1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
999 18TH STREET - SUITE 500
DENVER, CO 80202-2466

MAY 2 3 2000

Ref: 8EPR-ER

ACTION MEMORANDUM

SUBJECT: Request for a Time Critical Removal Action Approval and Exemption from the 12-month, $2-million Statutory Limit at the Libby Asbestos Site-Export Plant & Screening Plant former Processing Areas, Libby, Lincoln County, Montana.

FROM: Paul Peronard, On-Scene Coordinator
Emergency Response Team

THROUGH: Steve D. Hawthorn, Supervisor
Emergency Response Unit

Douglas M. Skie, Director
Preparedness, Assessment & Emergency Response Programs

TO: Max H. Dodson, Assistant Regional Administrator
Office of Ecosystems Protection & Remediation

Site ID#: BC

Category of Removal: Time Critical

I. PURPOSE

The purpose of this ACTION MEMORANDUM is to request and document approval of the Removal Action described herein for two portions of the Libby Asbestos Site (Site), the Export Plant and the Screening Plant located in Libby, Lincoln County, Montana. In addition, this document shall serve as the request and documentation of approval of an exemption from the $2 million and 12-month statutory limits.

This Removal Action addresses the need to mitigate the threats to the local population and the environment posed by fibrous form amphibole asbestos into the environment during the extraction and processing of vermiculite ore. High concentrations of asbestos posing a health threat have been detected at two former vermiculite processing plants located in Libby: the Screening Plant and the Export Plant.

The proposed Removal Action will address immediate threats identified during EPA's first round of sampling in Libby which occurred from December 1999 through April 2000. EPA plans to conduct further evaluation of the results from sampling of 121 homes, as well as six Libby school buildings, other potential source areas, and various other businesses in Libby. This subsequent sampling, analysis and evaluation may identify additional time critical threats at the Site.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

Vermiculite was discovered just outside Libby, Montana, in 1881 by gold miners. In the early 1920's initial mining operations were begun by Mr. Edward Alley on the vermiculite ore body located approximately 7 miles northeast of Libby (Figure 1). Full scale operations began later that decade under the name of the Universal Zonolite Insulation Company (Zonolite). This ore body also contained amphibole asbestos fibers of the tremolite-actinolite-richterite-winchite solid solution series (herein referred to as amphibole asbestos) (Bureau of Mines Monograph, 1928). Unlike, the commercially exploited chrysotile asbestos, the tremolite-actinolite material has never been used commercially on a wide scale, and for most of the mine's operating life was considered a contaminant. The commercially exploited vermiculite was used in a variety of insulation products and construction materials, as a carrier for fertilizer and other agricultural chemicals, and as a soil conditioner.

Operations at the mine were fairly simple. The ore was strip mined using conventional equipment and then processed in an on-site dry mill to remove waste rock and overburden. Once beneficiated, the processed ore was trucked down Rainey Creek Road to a screening plant, which separated the milled ore into five size ranges for use in various products. From there, the material was shipped across the country, predominantly by rail, for either direct inclusion in products, or for expansion (also known as exfoliation) prior to use in products. Expansion was accomplished by heating the ore, usually in a dry kiln, to approximately 2000 °F, which boiled the water trapped in the crystalline matrix of the vermiculite, thus expanding the material by a factor of 10 to 15 fold.

In Libby, operations handling this material occurred at four main locations: the Mine and Mill located on Rainey Creek Road on top of Zonolite Mountain; the Screening Plant and Railroad Loading Station located astride the Kootenai River at the intersection of Rainy Creek Road and Highway 37 (the Screening Plant); the Expansion/Export Plant (the Export Plant) located off Highway 37 where it crosses the Kootenai River; and an Expansion Plant located at the end of Lincoln Road, near 5th Street (Figure 2). The Lincoln Road Expansion Plant apparently went off line sometime in the 1950's, and has

since been demolished. Investigations are underway to determine the exact location of this facility.

In 1963, the W.R. Grace Company (Grace) purchased Zonolite and continued operations in a similar fashion. A wet milling process was added to the operation in 1975, which operated in tandem with the dry mill, until the dry mill was taken off line in 1985. Expansion operations at the Export Plant ceased in Libby sometime prior to 1981, although this area was still used to bag and export milled ore until mining operations were stopped in 1990. Before the mine closed in 1990, Libby produced about 80% of the world's supply of vermiculite.

1. Physical location

The Site is located in Montana, within Sections 3 and 10, T.30N.,R.31W. of the Libby Quadrangle, in the county of Lincoln. (See Figure 1). The Export Plant occupies approximately 11 acres of property which is now owned by the City of Libby, and leased to a retail lumberyard (Figure 2). Some amphibole asbestos contamination has been found on adjacent parcels of land which had been used as youth baseball fields, but are now unused. During operations the screened ore was trucked from the Screening Plant to the Export Plant, and staged with various other vermiculite related materials between the ballfields and the Export Plant, and in a few other outlying areas. All of these areas are considered part of the Export Plant for purposes of this Action Memo.

Currently, the Export Plant is used as a retail lumber mill. Its main features are five buildings used to house finished and rough lumber, and other construction related materials. These buildings also contain various milling equipment, tools, and a retail center. The buildings are all of basic wood construction. The Export Plant has paved access to Highway 37, and part of the property is now being used as a laydown area in support of improvements to the Highway 37 Bridge across the Kootenai River.

The Screening Plant occupies approximately 21 acres of property which is now used for combined commercial/residential use. It is likely that amphibole asbestos contamination has spread to the parcels of land (zoned residential) to the west and south of the Screening Plant proper. During operations the screened ore was moved by conveyor belt across the Kootenai River to a rail loading operation adjacent to a Burlington-Northern Rail Line. Amphibole asbestos contamination has also been found in this area. All of these areas are considered part of the Screening Plant for purposes of this Action Memo.

Currently, the Screening Plant is used as a wholesale nursery; a covered storage facility for recreational vehicles, motor boats, and other equipment; and a farm for medicinal mushrooms. It is also the location of the primary residence for the current property owners and is frequently visited by relatives, including their children and young grandchildren. Its main features are the residence (former lab/office building); an approximately one acre, 40' high storage building; several green houses; a series of concrete tunnels that house the mushroom farm, and are also used for storage; several smaller storage units; a tree orchard; and a planting operation.

2. Removal Site evaluation

In response to local concerns and news articles, an Environmental Protection Agency (EPA) Response Team, conducted an initial site visit on November 23, 1999. The initial investigation consisted of the following: a brief inspection of the former mine and processing facilities; interviews with local officials and some members of impacted families; an interview with a pulmonologist in Spokane, Washington who specializes in the treatment of asbestos related diseases; and the collection of a small set of environmental samples.

This investigation revealed two important findings. First, there are a large number of current and historic cases of asbestos related diseases centered around Libby, Montana. The pulmonologist in Spokane alone was currently treating over 200 cases of asbestos related diseases among people who had either lived in Libby or worked at the mine, and had provided care to dozens more who had already died. Out of this physician's cases were 33 incidents of apparently non-occupational exposures. Of these 33, six had no family or other ties to anyone working at the mine. While anecdotal in nature, these findings suggest definitive health effects from the amphibole asbestos found at Libby.

The second finding was the likelihood that significant amounts of asbestos contaminated vermiculite still remained in and around Libby. It is clear that high concentrations of amphibole asbestos remain in the tailings pile and tailings pond at the former mine itself. In addition, visible piles of unexpanded vermiculite remained at the Screening Plant, and the base material of Rainey Creek Road appeared to contain tailings and sands from the mine. Historic sampling by Grace and the EPA have documented that the beneficiated, but unexpanded ore from the Libby mine contained asbestos concentrations ranging from reported trace to 7% fibrous amphibole asbestos by weight (MRI, 1982 and Grace Data – Grace data has been reviewed by EPA, but documentation has not yet been provided by Grace to put into the administrative record). Residents described how piles of expanded and

unexpanded vermiculite used to sit at the Export Plant, next to two former youth baseball fields (Figure 2). Children were described as having regularly played in and around these piles. Both expanded and unexpanded vermiculite from waste piles around the mining operations were commonly used by local residents in their yards and gardens as a soil conditioner (Community Interview Summary, ISSI, 2000), and the expanded vermiculite was used as wall and attic insulation in many homes. Descriptions of historic operations of the mine, mill, and processing centers indicated that large amounts of dust and other fugitive emissions were released into the environment when these operations were still running.

These findings led EPA to initiate a larger scale rapid investigation with the following distinct goals:

i. Obtain information on airborne asbestos levels in Libby (a limited number of homes, businesses and the Export Plant and Screening Plant) in order to judge whether time-critical intervention is needed to protect public health.
ii. Obtain data on asbestos levels in potential source materials (at the Export Plant and Screening Plant), and identify the most appropriate analytical methods to screen and quantify asbestos in source material.

In December 1999, the Agency collected samples of air and dust from inside 32 homes and 2 businesses around Libby, and collected samples from yards, gardens, insulation, and driveways at these same locations. In addition, air, dust and soil samples were collected from the Screening Plant and Export Plant. Samples were also collected from along Rainy Creek Road. This was followed by the sampling at an additional 89 residences, area schools and other potential source areas around Libby in March and April 2000. To date, over 2000 samples have been collected. Seasonal sampling of ambient air around Libby and the former mine also began this past January, and will continue monthly, at least through next Fall.

Environmental data collected in Libby since November 23, 1999 clearly indicated the presence of complete pathways of exposure between residents and hazardous types of asbestos fiber. Asbestos is of potential concern because chronic inhalation exposure to excessive levels of asbestos fibers suspended in air can result in lung disease such as asbestosis, mesothelioma, and lung cancer. Subacute exposures as short as a few days have been shown to cause mesothelioma. Exposures via ingestion and dermal contact are considered to be of lesser concern. Therefore, as its first priority, EPA analyzed the air samples collected during the December, 1999 sampling effort. Characteristics of airborne amphibole asbestos were found to be in the *range of concern - i.e., fibers greater than 5 microns in length and having an aspect ratio of greater than 5 to 1* inside 4 of the 32 homes (3 with amphibole

fibers, one with chrysotile fibers). These fibers were also detected inside buildings (including several open air buildings) at the Export Plant and Screening Plant. Shorter amphibole asbestos fibers, i.e. less than 5 microns in length, were detected in roughly 30% of the indoor air and dust samples collected during this round. High concentrations, ranging up to 10% by weight, were also detected in soils from these two processing facilities. At the Screening Plant dust measurements showed numerous amphibole asbestos fibers greater than 5 microns in length and having an aspect ratio of greater than 5 to 1 (see Attachment 1 - Summary of Asbestos Measurements, and Figure 3 and Figure 4 - Asbestos Levels in Soils by PLM).

The samples from the remainder of the 34 homes/locations do not initially indicate an immediate concern, but the finding of the shorter amphibole asbestos fibers in air samples, as well as the indication that there is some asbestos content in yards and gardens around Libby is somewhat troubling. This information provides evidence of widespread fiber distribution in Libby and the possibility of complete exposure pathways for residents. Further analyses, with more refined analytical techniques are necessary to evaluate these issues, and are underway. Additionally, more sampling and analysis is necessary in the additional 89 homes tested in March and April, and of ambient air around Libby and the mine area of the Site. EPA will also investigate all potential source areas identified by local residents and through research.

3. Site characteristics

The population of Libby and surrounding communities located within a four-mile radius is estimated at 13,800. The principal industries in the area consist of lumber production, mining, and summer tourism. The topography is mountainous with pronounced river valleys. Libby and the surrounding area are subject to significant weather inversions.

The economy of Libby is somewhat depressed and the community has a high unemployment rate. Many of the homes tested by EPA are in need of repair, with obvious gaps in drywall where vermiculite insulation can enter the living space. Lawns are typically not sodded and exposed, unvegetated areas are common.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

Asbestos is a hazardous substance as defined by 40 CFR Section 302.4 of the NCP. During operation of the mine and related processing facilities, residents reported that large amounts of dust and fugitive emissions were released into the environment. The solid-solution series of tremolite-actinolite-richterite- winchite (referred to as